

### **HUMAN CREMATORY**



#### COMPLIANCE INSPECTION CHECKLIST

INSPECTION TYPE:	ANNUAL (INS1, INS2)  RE-INSPECTION (FUI)	COMPLAINT/DISCOVERY ( ARMS COMPLAINT NO:			
AIRS ID#: 1030512 001	<b>DATE:</b> 08/27/08	<b>ARRIVE:</b> 0950	<b>DEPART:</b> 1300		
FACILITY NAME: Vet	erans Funeral Care				
FACILITY LOCATION	1: 15381 Roosevelt Boulevan	rd			
	Clearwater, FL				
RESPONSIBLE OFFIC	IAL: James Rudolph?	PHONE: 72	27-467-0922		
CONTACT NAME: BI	air Kriever	PHONE: 72	27-467-0922		
REMITTANCE YEAR:	ENTITLE	MENT PERIOD:  (effective date)	/ 10/9/11 (end date)		
☐ IN COMPLIANCE	COMPLIANCE STATUS (chec	•			
IN COMPLIANCE	MINOR Non-COMPLIANC	CE X SIGNIFICANT Non-COM	PLIANCE		
		ENTS – Rule 62-296.401, F.A.C.			
PART II: TESTING/RE (check appropriat	CORDKEEPING REQUIREM e box(es))	ENTS – Rule 62-296.401, F.A.C.			
PART II: TESTING/RE (check appropriat  1. Were there any ob	CORDKEEPING REQUIREM e box(es)) jectionable odor(s) detected?	ENTS – Rule 62-296.401, F.A.C.		□Yes	⊠ No
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?-	cordening requirem e box(es)) jectionable odor(s) detected?ssions test conducted during this si	ENTS – Rule 62-296.401, F.A.C.	9 (Ref.: Chapter	□Yes	<ul><li>No</li><li>No</li></ul>
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?- 3. In order to demons days prior to the A	cordenate individual source compliance of the conduction of the co	ENTS – Rule 62-296.401, F.A.C.  ite visit according to EPA Method  e, was an annual visible emissions , and within 60 days prior to each	9 (Ref.: Chapter stest conducted 60 anniversary date?	Yes	⊠ No
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?- 3. In order to demons days prior to the A (Rule 62-296.401) 4. In order to demons completed within a) Carbon Monox	cordinate odor(s) detected?ssions test conducted during this sions test conducted during this sions. AGP Notification form submission (5)(i), F.A.C.)	ENTS – Rule 62-296.401, F.A.C.  ite visit according to EPA Method  e, was an annual visible emissions, and within 60 days prior to each  e were the remaining applicable station form submission? (Rule 62-2  low the requirements of 100 parts	9 (Ref.: Chapter stest conducted 60 anniversary date? andards testing 210.300(4), F.A.C.) per million by		
PART II: TESTING/RE  (check appropriat  1. Were there any ob  2. Was a visible emis 62-297, F.A.C.)?-  3. In order to demons days prior to the A (Rule 62-296.401)  4. In order to demons completed within a) Carbon Monox volume, dry basis 10 (Ref.: Chapter b) Oxygen test pe	corrected to 7% O <sub>2</sub> on an hourly ferformed according to EPA Metho	ENTS – Rule 62-296.401, F.A.C.  ite visit according to EPA Method  e, was an annual visible emissions, and within 60 days prior to each  we were the remaining applicable station form submission? (Rule 62-2  low the requirements of 100 parts average basis and tested according  d 3 (Ref.: Chapter 62-297, F.A.C.)	9 (Ref.: Chapter stest conducted 60 anniversary date? andards testing 210.300(4), F.A.C.) per million by g to EPA Method	□Yes □Yes	No No □
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?- 3. In order to demons days prior to the A (Rule 62-296.401) 4. In order to demons completed within a) Carbon Monox volume, dry basis 10 (Ref.: Chapter b) Oxygen test pe c) Particulate mat dry standard cubic (Ref.: Chapter.62-	corrected to 7% O <sub>2</sub> on an hourly 62-297, F.A.C.)?	ite visit according to EPA Methode, was an annual visible emissions, and within 60 days prior to each ewere the remaining applicable station form submission? (Rule 62-2 low the requirements of 100 parts average basis and tested according d 3 (Ref.: Chapter 62-297, F.A.C.) al to or below the requirements of 7% O <sub>2</sub> and tested according to EP.	9 (Ref.: Chapter	□Yes □Yes □Yes □Yes	<ul><li>No</li><li>No</li><li>No</li><li>No</li><li>No</li></ul>
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?- 3. In order to demons days prior to the A (Rule 62-296.401)  4. In order to demons completed within a) Carbon Monox volume, dry basis 10 (Ref.: Chapter b) Oxygen test pe c) Particulate mat dry standard cubic (Ref.: Chapter.62- 5. Was all emissions capacity?	corrected to 7% O <sub>2</sub> on an hourly 62-297, F.A.C.)?	ENTS – Rule 62-296.401, F.A.C.  ite visit according to EPA Method  e, was an annual visible emissions, and within 60 days prior to each  e were the remaining applicable station form submission? (Rule 62-2 low the requirements of 100 parts average basis and tested according  d 3 (Ref.: Chapter 62-297, F.A.C.) al to or below the requirements of 7% O <sub>2</sub> and tested according to EP  operating at the manufacturers recorded.	9 (Ref.: Chapter stest conducted 60 anniversary date? andards testing 210.300(4), F.A.C.) per million by g to EPA Method 0.080 grains per A Method 5 commended	□Yes □Yes □Yes □Yes □Yes □Yes □Yes □Yes	<ul> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>
PART II: TESTING/RE (check appropriat  1. Were there any ob 2. Was a visible emis 62-297, F.A.C.)?- 3. In order to demons days prior to the A (Rule 62-296.401)  4. In order to demons completed within a) Carbon Monox volume, dry basis. 10 (Ref.: Chapter b) Oxygen test pe c) Particulate man dry standard cubic (Ref.: Chapter.62- 5. Was all emissions capacity? 6. Was CO & PM co 7. Was the Departme 8. Was the required to	corrected to 7% O <sub>2</sub> on an hourly 62-297, F.A.C.)?	ite visit according to EPA Methode, was an annual visible emissions, and within 60 days prior to each we were the remaining applicable station form submission? (Rule 62-2 low the requirements of 100 parts average basis and tested according d 3 (Ref.: Chapter 62-297, F.A.C.) al to or below the requirements of 7% O <sub>2</sub> and tested according to EP	9 (Ref.: Chapter  stest conducted 60 anniversary date?  andards testing 210.300(4), F.A.C.) per million by g to EPA Method  0? 0.080 grains per A Method 5  commended al crematory unit? iance test? ger than 45 days after	☐Yes ☐Yes ☐Yes ☐Yes ☐Yes ☐Yes ☐Yes ☐Yes	<ul> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>

PART III: OPERATING/RECORDKEEPING REQUIREMENTS – Rule 62-296.401, F.A.C.		
(check appropriate box(es))		
1. Is there <b>Continuous Emissions Monitoring System</b> (CEMS) equipment installed on each unit to record primary and secondary chambers where there is a 1.0 second gas residence time in the secondary chamber of accordance with the manufacturer's instructions?	ombustion ⊠Yes ⊠Yes	zone in No No
measurements, maintenance, reports and records?  1) All measurements (including CEMS)	<ul><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li><li>Yes</li></ul>	<ul> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>
b) ON or AFTER August 30, 1989? (If this box checked, skip #3 and continue on to #4)  3. If constructed BEFORE August 30, 1989 is the:  a) secondary chamber combustion zone providing at least a 1.0 second gas residence time @ 1600°F?  b) actual operating temperature of the secondary chamber combustion zone no less than 1400°F throughout the combustion process in the primary chamber?  c) cremation in the primary chamber begun after the secondary chamber combustion zone temperature is equal to or greater than 1400°F?  d) required monitoring equipment installed and operational, and providing continuous monitoring to record the temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary chamber combustion zone according to the manufacturer's instructions?	□Yes □Yes □Yes	<ul><li>□ No</li><li>□ No</li><li>□ No</li><li>□ No</li></ul>
<ul> <li>4. If constructed ON or AFTER August 30, 1989 is the: <ul> <li>a) volume in the secondary combustion zone sufficient to provide at least a 1.0 second gas residence tir @ 1800° F?</li> <li>b) the actual operating temperature of the secondary chamber combustion zone no less than 1600°F throughout the combustion process in the primary chamber?</li> <li>c) secondary chamber combustion zone temperature equal to or greater than 1600°F before the crematic process begins in the primary chamber?</li> </ul> </li> <li>5. Are appropriate cremation containers containing no more than 0.5 % (percent) by weight chlorinated plastics used during the cremation of dead human bodies?</li> <li>a) If the answer to question 4 above is YES, is certifying documentation from the manufacturer that the</li> </ul>		<ul><li>□ No</li><li>□ No</li><li>□ No</li><li>□ No</li></ul>
are composed of 0.5% or less by weight chlorinated plastics kept on file at the site for the duration of their use and for at least two years after their use?————————————————————————————————————	Yes ☐Yes ☐Yes	□ No □ No □ No □ No □ No

PART IV: <u>SPECIAL CONDITIONS AND PROCEDURES</u> – R A. <u>New or Modified Process Equipment</u>	tule 62-296.401, F.A.C.
<ol> <li>Since the last inspection has there been</li> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without replicit contents.</li> </ol>	lacement?  Yes No
recent notification form?d) If you answered <u>YES</u> to any of the above, did the own otification form and appropriate fee (Rule 62-4.050,	rner submit a new and complete
local program office?  2. If a crematory unit has been modified to the extent that a I was required, have all operators been retrained to operate	Department air construction permit
3. In the case of new or modified equipment, where a Depart required, has the owner submitted copies of all operator tr a) submitted within the 15 day required window following	tment air construction permit was raining certificates? Yes No
Chris R. Brodeur	
Inspector's Name (Please Print)	Date of Inspection
Inspector's Signature	Approximate Date of Next Inspection
COMMENTS: See the attached Pinellas County inspection report	form for additional information

F	AC]	LIT	Y: Veterans Funeral (	Care		PERMIT ID:	2760
						DISTRICT:	Southwest
A	DD	RES	S: 15381 Roosevelt Bou	llevard		CONTACT PHO	ONE:
			Clearwater, FL			727-467-0	)922
A	RM	S N	0:	PERMIT NO:		<b>Expiration Date</b>	
		103	80512 001	1030512-002-AG		Renewal Date:	9/9/11
						Test Date:	7/28/00
requ	aire	s spe		odel IEE Power-Pak II. Maximum cap ondary (afterburner) chamber has a min			
IΛ	SP	ECT	ION DATE:	ARMS INSPECTION TYPE:	COME	PLIANCE STATU	VS:
		27/08		□INS2 or ⊠INS			⊠SNC
	Ty	pe o	f Inspection:	Re-inspection Comp		Drive-by	Quarterly
		-		A. General Review:			
1	_		nit File Review				⊠Yes □ No
2		Intro	oduction and Entry				⊠Yes □ No
		Con	aments: I was given a tour of th	ne facility by the General Manager Bla	ir Kriever.		
		char or 2. <b>Is th</b> <b>Is th</b>	Any other similar minor admir ne Authorized Representative ne facility contact still: James I -210.310(2)(d), F.A.C.]	still: James Rudolph?	nissions u	nits or operations	
I	M N	S N					
N	C			B. Specific Conditions			
			visible emissions not exceedin hour period. [Rule 62-296.40]		e allowed	for up to six (6) m	inutes in any one (1)
				isible emissions test, conducted on <u>07</u> ed during this site visit ∐Yes or ⊠No.			
			(⊠ 1600 degrees Fahrenheit received by the Departmenthe secondary chamber of 62-296.401(5)(c), F.A.C. ☐ 1400 degrees Fahrenheit by the Department prior to secondary chamber combe 296.401(5)(c), F.A.C.]	throughout the combustion process in to August 30, 1989. Cremation in the position zone temperature is equal to or good to be a second to the composition of the combustion of the combusti	the primar tion in the or greater he primary primary ch greater tha	ry chamber, for co e primary chamber than 1600 degree y, for construction amber shall not be in 1400 degrees Fa	enstruction applications is shall not begin unless is Fahrenheit. [Rule applications received applications the ahrenheit. [Rule 62-
				ed to operate at a temperature of $\_1600$ le emissions tests, or $\boxtimes$ rule. Based or observed was $\_525^{\circ}$ F			

I N	M N C	S N C	B. Specific Conditions
			Betweens the dates of 04/04/07 and 06/12/08 there were 16 instances where the operational temperature of the secondary chamber went below 1600 deg. F., during combustion, for a period of from 1 to 5 minute. Most of these low temperature excursions occurred within ten minutes of initial combustion.  On 01/04/08 the temperature during combustion, dropped below 1600 deg. F. for ~ 17 min., a low temperature of
			~1150 deg. F. was noted.  In addition, there were five instances of cremation in the primary chamber before the secondary chamber reached a temperature equal to or greater than 1600 deg. F.:  1. 04/03/07 cremation began @ 525 deg. F. temperature below 1600 deg. F. for ~ 25 min.  2. 05/08/07 cremation began @ 1250 deg. F. temperature below 1600 deg. F. for ~ 8 min.  3. 07/14/07 cremation began @ 1500 deg. F. temperature below 1600 deg. F. for ~ 5 min.  4. 10/06/07 cremation began @ 1500 deg. F. temperature below 1600 deg. F. for ~ 4 min.  5. 05/05/08 cremation began @ 1475 deg. F. temperature below 1600 deg. F. for ~15 min.
			Allowed Materials - Human crematory units shall cremate only human or fetal remains with appropriate containers. The remains may be clothed. The containers shall contain no more than 0.5 percent by weight chlorinated plastics as demonstrated by the manufacturer's data sheet. If containers are incinerated, documentation from the manufacturer certifying that they are composed of 0.5 percent or less by weight chlorinated plastics shall be kept on-file at the site for the duration of their use and for at least two (2) years after their use. No other material, including biomedical waste as defined in Rule 62-210.200, F.A.C., shall be incinerated. [Rule 62-296.401(5)(d), F.A.C.]  Comments: Reviewed records for the months of _01/07 to 08/27/08. The highest reported chlorine content was _0_%. Supporting documentation was verified ( Yes or  No)
$\boxtimes$			Equipment Maintenance -All human crematory units shall be maintained in proper working order in accordance with the manufacturer's specifications to ensure the integrity and efficiency of the equipment. If a crematory unit contains a defect that affects the integrity or efficiency of the unit, the unit shall be taken out of service. No person shall use or permit the use of that unit until it has been repaired or adjusted. Repair records on all crematory units shall be maintained onsite for at least two years. A written plan with operating procedures for startup, shutdown and malfunction of each crematory unit shall be maintained and followed during those events. Each unit's burners shall be operated with a proper air-to-fuel ratio. If the unit so allows, the burners' flame characteristics shall be visually checked at least once during each operating shift and adjusted when warranted by the visual checks. [Rule 62-296.401(5)(e), F.A.C.]  **Comments: The facility* ( does/ does not) have a written plan for operating procedures for startup, shutdown and malfunction.  *Repair records were reviewed for the months of _01/07 to 08/08 The records were available and maintained on site for a period of _two years.  The crematory unit ( does/ does not) allow, the burners' flame characteristics shall be visually checked. The flame ( was/ was not/ NA) observed during each shift.
			Frequency of Testing.  1. The owner or operator of any human crematory unit using an air general permit shall have a performance test conducted for visible emissions no later than thirty (30) days after the unit commences operation, and annually thereafter.  2. The owner or operator of any human crematory unit operating under the authority of an air construction permit or air operation permit shall have a performance test conducted for visible emissions prior to submitting the application for an initial air operation permit, and annually thereafter.  3. The owner or operator of any human crematory unit shall not be required to have performance tests conducted for carbon monoxide and particulate matter, except as provided at paragraph 62-297.310(7)(b), F.A.C.  [Rule 62-296.401(5)(h), F.A.C.]  Comments: The last test was conducted on07/28/08. This( ☑is / □is not) within the allowable 60 day window.

B. Specific Conditions  Pation - The owner or operator shall notify the Department, at least 15 days prior to the date on which each pliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be for coordinating and having such test conducted for the owner or operator.  10(7)(a)9. F.A.C.]  The County was notified on _07/14/08_, for the test that was conducted on _07/28/08  11 is not) within the allowable 15 day window.  12 - The required test report shall be filed with the PCDEM as soon as practical but no later than 45 days to scompleted. [62-297.310(8), F.A.C.]  The last test was conducted on _07/28/08_, and the test results were submitted on _08/04/08  12 is not) within the allowable 45 day window.  13 Monitoring Requirements—Each crematory unit shall be equipped and operated with a continuous ecord temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary inbustion zone in accordance with the manufacturer's instructions. In addition, each crematory unit installed
Pation - The owner or operator shall notify the Department, at least 15 days prior to the date on which each pliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be for coordinating and having such test conducted for the owner or operator.  [107] [107] [108] [
Pation - The owner or operator shall notify the Department, at least 15 days prior to the date on which each pliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be for coordinating and having such test conducted for the owner or operator.  [107] [107] [108] [
t is completed. [62-297.310(8), F.A.C.]  The last test was conducted on _07/28/08_, and the test results were submitted on 08/04/08  _is not) within the allowable 45 day window.  Sometimes Monitoring Requirements—  Each crematory unit shall be equipped and operated with a continuous ecord temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary embustion zone in accordance with the manufacturer's instructions. In addition, each crematory unit installed
is not) within the allowable 45 day window.  Sometimes Monitoring Requirements - Each crematory unit shall be equipped and operated with a continuous ecord temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary embustion zone in accordance with the manufacturer's instructions. In addition, each crematory unit installed
ecord temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary mbustion zone in accordance with the manufacturer's instructions. In addition, each crematory unit installed
ry 1, 2007, shall be equipped and operated with a pollutant monitoring system to automatically control based on continuous in-stack opacity measurement. Such system shall be calibrated to restrict combustion ry chamber whenever any opacity exceeding 15% opacity is occurring. A complete file of the theorem is; all continuous monitoring systems, monitoring devices, and performance testing measurements; all monitoring system performance evaluations; all continuous monitoring system or monitoring device shecks; and all adjustments, preventive maintenance, and corrective maintenance performed on these levices, shall be recorded in a permanent legible form available for inspection. Continuous temperature documentation shall include operator name, operator indication of when cremation in the primary chamber date, time, and temperature markings. Pollutant monitoring system documentation shall include indication opacity measurement system was cleaned and checked for proper operation in accordance with the ser's recommended maintenance schedule. The file shall be retained for at least two (2) years following the such measurements, maintenance, reports, and records. [Rule 62-296.401(5)(i), F.A.C.]  **Reviewed temperature charts for the months of _01/07 to 08/26/08.** The last calibration on the contact was on _02/13/08 (verified by work order from Matthews and internal maintenance log), tuture probe appears properly placed (\(\times\) Yes or \(\times\) No).  **(\(\times\) \(\times\) \(\times\) does not) have to be equipped dwith a pollutant monitoring system to automatically control combustion based on continuous in-stack systement.  **(\(\times\) \(\times\) is not\(\times\) NA) calibrated to restrict combustion in the primary chamber whenever any opacity 5% opacity is occurring.  **9 instances of incomplete documentation on the temperature charts: 04/07 no signature.  **13/07 no signature.**  **13/07 no date or signature

I	M N	S N	
N	C	C	B. Specific Conditions
$\boxtimes$			<u>Process Rate</u>
			Comments: The maximum load for this crematory unit is <u>750</u> pounds. The largest body cremated during this review
			period was400# on 07/14/07.
т	M		
N	N C	N C	C. Selected General Conditions and Procedures
		$\boxtimes$	<b>Periods of Noncompliance</b> - If, for any reason, the owner or operator of any facility operating under an air general
			permit pursuant to Rule 62-210.300(4)(a), F.A.C., does not comply with or will be unable to comply with any condition
			or limitation of the permit, the permittee shall immediately provide the Department with the following information:  1. A description of and cause of noncompliance; and
			2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the
			noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the
			noncompliance. The permittee shall be responsible for any and all damages which may result.
			[62-210.310(3)(i), F.A.C.]
			Comments: The permittee did not notify the Department of the following periods of non-compliance:
			1. 04/06/07 temperature drop below 1600 deg. F. to ~1425 deg. F. for ~ 5 min. Afterburner reset FDEP malf.
			2. 08/09/07 temperature drop below 1600 deg. F. to ~1275 deg. F. for ~ 7 min. Afterburner issue FDEP malf.
			3. 10/05/07 temperature drop below 1600 deg. F. to ~ 1325 deg. F. for ~ 8 min. Afterburner shutoff FDEP malf.
			In addition, there are twenty two instances of failure to notify the Department of non-compliance temperature
			excursions documented under <u>Operating Temperature</u> .
$\boxtimes$			<u>Valid Permit</u>
			To avoid lapse of authority to operate, an owner or operator intending to use, or continue to use, an air general permit must submit the proper registration form and processing fee at least thirty (30) days prior to expiration of the facility's
			existing air operation permit or air general permit.
			[62-210.310(2)(c)2., F.A.C.]
			Comments: The permit expires on 10/9/11. A new notification form is required to be submitted no later than 9/9/11.
$\boxtimes$			Equipment Changes - The owner or operator shall maintain records of all equipment changes. In the case of
			installation of new process or air pollution control equipment, alteration of existing process or control equipment
			without replacement, or replacement of existing process or control equipment with equipment substantially different in
			terms of capacity, method of operation, material processed, or intended use than that noted on the most recent registration form, the owner or operator shall submit a new and complete air general permit registration form for the
			facility with the appropriate fee pursuant to Rule 62-4.050, F.A.C. to the Department, provided, however, that any
			change that would constitute a new major stationary source, major modification, or modification that would be a major
			modification but for the provisions of paragraph 62-212.400(2)(a), F.A.C., shall require authorization by air
			construction permit. [62-210.310(2)(e)., F.A.C.]
			Comments: None.
CI	D. Other:		
			nference  \times Yes \to No  During the closing conference with Blair Kriever (James Rudolph was not available) I noted that the facilities 'cold
	start' procedure for large bodies was not compliant with their permit. I also pointed out the need for Veterans to notify DEM when		
eve	r the	ere v	vas a period of noncompliance, i.e. temperature excursion. The lack of full documentation on the temperature charts and
			white-out' was also addressed. After several missed calls, James Rudolph was contacted via telephone on 09/25/08.
Oth	ner C	Com	ments:
Ins	pect	or(s	s): Chris R. Brodeur, Pinellas County, Air Quality Division
	Inspector(s): Chris R. Brodeur, Pinellas County, Air Quality Division  Signature(s)  Date:		
			CLOC? ACCESS? ARMe?